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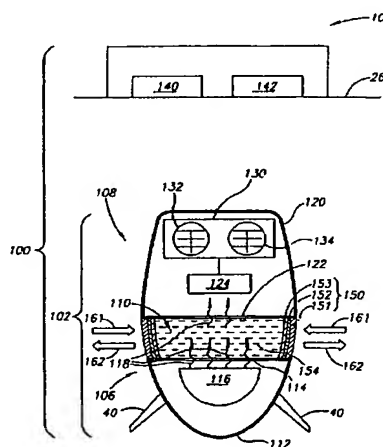
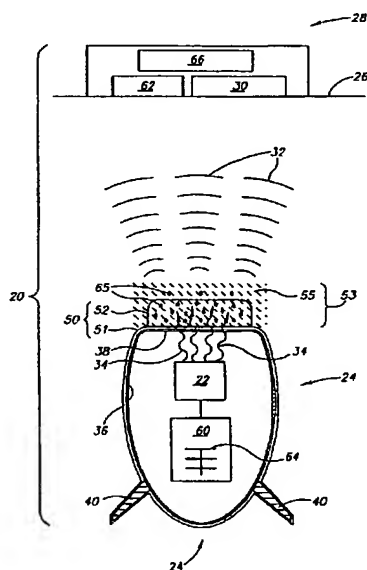
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(54) Title: GLUCOMETER COMPRISING AN IMPLANTABLE LIGHT SOURCE



(57) Abstract: Apparatus for assaying an analyte in a body comprising: at least one light source (22) implantable in the body controllable to illuminate a tissue region in the body with light at at least one wavelength that is absorbed by the analyte and as a result generates photoacoustic waves in or changes in an acoustic property of the tissue region; at least one acoustic sensing transducer (30) adapted to be coupled to the body for receiving acoustic energy from the tissue region and generating signals responsive thereto; and a processor (66) that receives the signals and processes them to determine a concentration of the analyte in the illuminated tissue region. Further, an apparatus for assaying an analyte in an interstitial fluid in a body comprising an implantable light source (116) and an implantable photosensor (124).



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